



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,691	02/25/2002	Kazuo Sugimoto	1163-0394P	8326

2292 7590 10/06/2005

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

BHATNAGAR, ANAND P

ART UNIT PAPER NUMBER

2623

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/080,691

Applicant(s)

SUGIMOTO ET AL.

Examiner

Anand Bhatnagar

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 9-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8 is/are rejected.
- 7) ☒ Claim(s) 5-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 02/25/02&09/30/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Applicant's election without traverse of Species 3 (fig. 5, claims 1-3 and 5-12) in the reply filed on 07/22/05 is acknowledged. Applicant has elected species 3 corresponding to fig. 5 but there are several species to fig. 5, wherein claims 8-12 correspond to the different species. Claims 8-12 are all different alternative functions/processes of the effective macroblock identification unit (figs. 1 & 5, element 103) as described on pages 12 and 13 in the specifications of applicant's instant invention. Since these claims are different processes/functions of the same element then these claims are different species and, therefore, are withdrawn from consideration. Examiner will address a single species which will be claims 1-3 and 5-8.

### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities: Applicant in the claim limitations wants to refer, further in the claims and limitations, "to a number of effective macroblocks" as "a number of adjacent effective macroblocks"), but the examiner is unsure if applicant wants this as a positive limitation in the claim since it is enclosed in parenthesis. As recited, examiner does not give it any weight. If applicant wants this as a positive limitation in the claim it would be better if it was recited without the parenthesis and maybe worded a little differently, for example, such as "wherein it will be further

Art Unit: 2623

designated as a number of adjacent effective macroblocks." Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsougarakis et al. (U.S. patent 6,901,110 B1, will be further referred as "Tsou.").

Regarding claim 1: Tsou. Discloses a moving object detector comprising:  
an effective macroblock identification unit for identifying one or more candidates for a macroblock that can be contained in an on-screen moving object as one or more effective macroblocks by using an encoding parameter (col. 1 lines 6-10, col. 3 lines 31-54, wherein the motion vectors, i.e. encoding parameters, are determined for each macroblock, and the blocks with sufficient information, i.e. read as effective macroblocks, are identified by a thresholding process); and

a moving object determination unit for determining whether or not each of the one or more effective macroblocks identified by said effective macroblock identification unit is contained in a moving object based on a number of effective macroblocks (referred to as a number of adjacent effective macroblocks from here on) which are directly adjacent to each of the one or more effective macroblocks or indirectly adjacent to each of the one or more effective macroblocks via one or more other effective macroblocks (col. 3 lines 54-65, wherein the neighboring blocks to the macroblock(s) are checked for similar motion, i.e. read as determining the adjacent macroblocks that are also efficient macroblocks) .

Regarding claim 2: The moving object detector wherein said moving object determination unit counts the number of adjacent effective macroblocks for each of the one or more effective macroblocks identified by said effective macroblock identification unit, and, when the number of adjacent effective macroblocks exceeds a predetermined threshold value, determines that group of plural effective macroblocks directly or indirectly adjacent to one another and including each of the one or more effective macroblocks moving object (fig. 5B element 524 and col. 11 lines 4-18).

Regarding claim 3: The moving object detector further comprising a coded stream analyzer for analyzing a coded stream obtained by encoding a moving image so as to extract an encoding parameter from the coded stream, and for outputting the encoding parameter to said effective macroblock identification unit

(col. 3 lines 35-65, wherein the motion vectors are read as the encoding parameters and they are used to detect the motion of the objects).

Regarding claim 8: The moving object detector wherein said effective macroblock identification unit identifies a macroblock as an effective macroblock that can be contained in a moving object when an encoding mode of the macroblock extracted as the encoding parameter of the macroblock is an intra coding mode (col. 3 lines 35-65, wherein the neighboring boxes are checked, i.e. intra coding since it is in the same frame).

#### ***Allowable Subject Matter***

4. Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

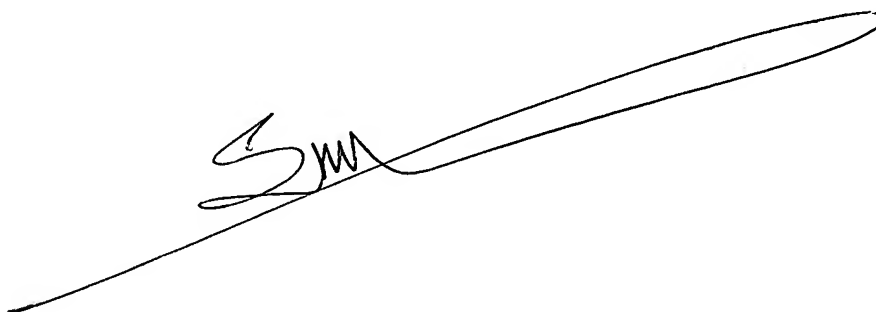
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamori et al. (U.S. patent pub. 2001/0021272 A1) for a motion vector searcher in a motion image.

Art Unit: 2623

**Contact Information**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Bhatnagar whose telephone number is (571) 272-7416, whose supervisor is Jingge Wu whose number is (571) 272-7429, Central fax is 571-273-8300, and Tech center 2600 customer service office number is 703-306-0377.

A handwritten signature in black ink, appearing to read 'SAMIR', followed by a long, sweeping horizontal line that extends to the right.

**SAMIR AHMED  
PRIMARY EXAMINER**

Handwritten initials 'AB' in black ink.

Anand Bhatnagar

Art Unit 2623

October 1, 2005